

**Amendment and Response**

Serial No.: 09/698,412

Confirmation No.: 5638

Filed: 27 October 2000

For: AUTOMATED RESPIRATOR FIT TESTING METHOD AND SYSTEM

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AI Sub 151  
cont'd

37. (NEW) A method of qualitative respirator fit testing, the method comprising:  
providing an automated qualitative respirator fit testing system that comprises a plurality of test stations and an automated aerosol generator system in fluid communication with each of the test stations;

locating at least one test subject at one test station of the plurality of test stations; and  
conducting a qualitative fit test on each test subject located at one of the test stations, wherein the qualitative fit test conducted at each of the test stations comprises:

delivering a repeatable, selected amount of test aerosol to the test station  
using the automated aerosol generator system after locating a respirator on the test  
subject, wherein the test subject is exposed to the test aerosol; and

receiving test feedback from the test subject at the test station after exposure  
to the test aerosol.

38. (NEW) A method of qualitative respirator fit testing, the method comprising:  
providing an automated qualitative respirator fit testing system that comprises a plurality of test stations and an automated aerosol generator system in fluid communication with each of the test stations;

locating at least one test subject at one test station of the plurality of test stations; and  
conducting a qualitative fit test on each test subject located at one of the test stations, wherein the qualitative fit test conducted at each of the test stations comprises:

delivering different selected amounts of test aerosol to at least two of the test  
stations using the automated aerosol generator system after locating a respirator on  
test subjects at the at least two of the test stations, wherein the test subjects are  
exposed to the different selected amounts of test aerosol at the same time; and

receiving test feedback from the test subject at the test station after exposure  
to the test aerosol.

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39. (NEW) The method of claim 1, comprising:

capturing at least one image of at least one test subject at one of the test stations during exposure of the test subject to the test aerosol; and  
storing the at least one image in a database.

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